

***Astragalus cusickii* var. *cusickii* Gray**

Cusick's milk vetch
Fabaceae (Pea Family)

Status: State Sensitive

Rank: G5T4S1?

General Description: Perennial with numerous stems that are leafless at the base, 12 to 24 in. (30 to 60 cm) tall; leaves greenish in color, with 7 to 11 linear, remote leaflets $\frac{3}{16}$ to $\frac{3}{4}$ in. (5 to 20 mm) long that have appressed hairs on the upper surface; stipules that are sometimes connate; flowers white, in loose racemes; fruits thin and appearing translucent, hairless, obovoid and $\frac{1}{3}$ to 1 in. (2 to 22 mm) long when pressed, with a short beak at the tip and borne on slender stipes.

Identification Tips: The main characteristics distinguishing variation *A. cusickii* var. *cusickii* from the generally taller and more slender *A. cusickii* var. *flexipes* are that in var. *cusickii* the leaflets are strigulose above and the pod is obovoid or obovoid-ellipsoid from $\frac{1}{16}$ in. ($1\frac{1}{4}$ to $2\frac{1}{4}$ mm) wide when flattened by pressing, while in var. *flexipes* the leaflets are generally hairless on the upper surface and pods are half-obovoid or half-ellipsoid. It may be difficult or impossible to distinguish the two forms where their distribution overlaps along the Snake River Canyon from the mouth of the Salmon River to the mouth of the Grand Ronde River.

Phenology: Observed flowering in May and June and fruiting in June and July.

Range: A regionally endemic species, *Astragalus cusickii* var. *cusickii* is found in the Snake River Canyon and along the Snake River tributaries to the mouth of the Grand Ronde River in eastern Oregon, adjacent Idaho, and Asotin County, Washington.

Habitat: The taxon grows on dry grassy or rocky slopes in loose, finely textured soils derived from basalt. In Washington, *A. cusickii* var. *cusickii* grows on ledges or crevices of basalt cliffs, in bare soil on road cuts, on talus, and on sagebrush plains usually in areas where vegetative cover is less than 50%. Associated species include blue bunch wheat grass (*Agropyron spicatum*) and Idaho fescue (*Festuca idahoensis*) and may also include cheatgrass (*Bromus tectorum*), rattle grass (*Bromus brizaeformis*), and vetch (*Vicia* sp.).

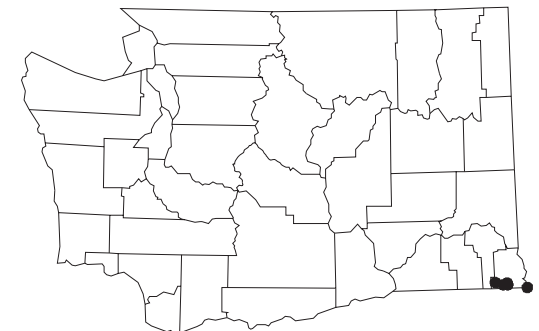
Astragalus cusickii* var. *cusickii

Cusick's milk vetch



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Known distribution of
Astragalus cusickii
var. *cusickii*
in Washington



● Current (1980+)
○ Historic (older than 1980)

Astragalus cusickii* var. *cusickii

Cusick's milk vetch



Photo by John Gamon



Photo by Florence Caplow



Photo by Florence Caplow

Astragalus cusickii* var. *cusickii

Cusick's milk vetch

Ecology: *Astragalus cusickii* var. *cusickii* inhabits very rugged and drought-prone areas with extremely high and low seasonal temperatures. The physical isolation of the milk vetch has likely played a decisive role in shaping the evolution of this species (Barneby, 1964).

State Status Comments: This species is globally rare yet locally abundant within a small range and restricted habitat in eastern Oregon and along the southeast edge of Washington. There are no indications of either a declining or increasing trend in the known populations.

Inventory Needs: Additional inventory is needed. Protection and preservation of known populations is recommended.

Threats and Management Concerns: The only known threat is disturbance by grazing cattle. Cattle tend to stir up, fertilize, and compact the soil, creating ideal growing conditions for non-native weeds, which could compete with *Astragalus cusickii* var. *cusickii* for available nutrients.

Comments: *Astragalus cusickii* var. *cusickii* intergrades with and may be indistinguishable from var. *flexipes* where the two forms overlap in range along the Snake River downstream to the mouth of the Grande Ronde River. At the present time, the mouth of the Salmon River provides the one point of contact between the two species, according to Barneby, 1964.

References:

Barneby, R.C. 1964. *Atlas of the North American Astragalus*, Part I. Memoirs of the New York Botanical Garden, Volume 13: 1-597.

Hitchcock, C.L., A. Cronquist, M. Ownbey and J.W. Thompson. 1961. *Vascular Plants of the Pacific Northwest, Part 3: Saxifragaceae to Ericaceae*. University of Washington Press, Seattle, WA. 614 pp.